

# Velogenic Newcastle disease



outbreak alert



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## VELOGENIC NEWCASTLE DISEASE

Velogenic Newcastle disease (VND) is a highly infectious virus illness that affects poultry and other birds. Although several other strains of Newcastle disease exist, VND is by far the most deadly. It spreads rapidly and close to 90% of infected birds die. Although Canada has experienced past outbreaks, we have been free for over 10 years. The last outbreak in 1971-73 resulted in the slaughter of 250 thousand birds and dramatically reduced egg production and export sales of Canadian poultry products. It is in the best interests of all Canadians to prevent a recurrence. Read this leaflet carefully and learn what you can do to prevent and control further outbreaks.

### History

From 1926 to 1946, ships spread Newcastle disease from country to country by carrying live birds or infected poultry carcasses for trade. In 1962, a worldwide epidemic occurred, likely due to the marketing of infected budgies, parrots and other exotic birds. Newcastle disease was first discovered in Canada in 1948 and we've had sporadic outbreaks since. All have been effectively controlled and eradicated.

### How VND is spread

Strains of VND exist in wild and pet birds, such as parrots and budgies. The disease is usually introduced into countries by smuggled pet birds or because import restrictions on such birds are weak. These birds may shed the virus yet show no symptoms. The virus can survive for long periods in their body secretions and excretions. Contaminated feed, bedding, clothing and poultry equipment are, therefore, major causes of spread. Virus shed into the air from the respiratory tracts of infected birds can also infect other birds.



Internal organs. The dark brown areas on the liver are hemorrhages typical of the disease. Fat on right is normal.

## **If an outbreak of VND should occur in Canada**

If an outbreak occurred in Canada, the disease would likely spread rapidly due to its resistance to environmental conditions and the complexity of Canada's poultry industry. VND would have grave economic impacts. Losses of poultry and decreased egg production would increase consumers' costs for poultry and poultry products. Exports of poultry and poultry products to countries free from the disease would suffer. Depending on the severity of the outbreak, millions of dollars in export sales could be lost each day.

In the event of an outbreak, Agriculture Canada has developed an emergency program to control and stamp out the disease. Infected and exposed birds in the area of an outbreak will be slaughtered and buried on the premises to prevent further spread. Farmers will be compensated for the loss of their birds. Infected farms will be quarantined, cleaned and disinfected. Poultry on surrounding farms will also be tested for signs of the disease.

## **Signs of VND: what to look for:**

Signs of VND in poultry and other birds are:

- depression;
- loss of appetite;
- rapid breathing; and
- rapid decrease in egg production.

Birds can die suddenly even though they show no signs of illness.





Birds such as parrots and budgies often carry the virus from one country to another.


Other strains of VND show additional symptoms. *Viscerotropic* VND causes swelling of the head and neck, congestion of the comb and diarrhea. *Neurotropic* VND causes severe respiratory distress and nervous signs such as muscle tremors, twisted necks and paralysis.

Clinical diagnosis is made on the basis of symptoms, abnormalities found in dead birds and events leading to the disease. However, since the symptoms closely resemble those of a number of other poultry diseases, laboratory confirmation is essential.

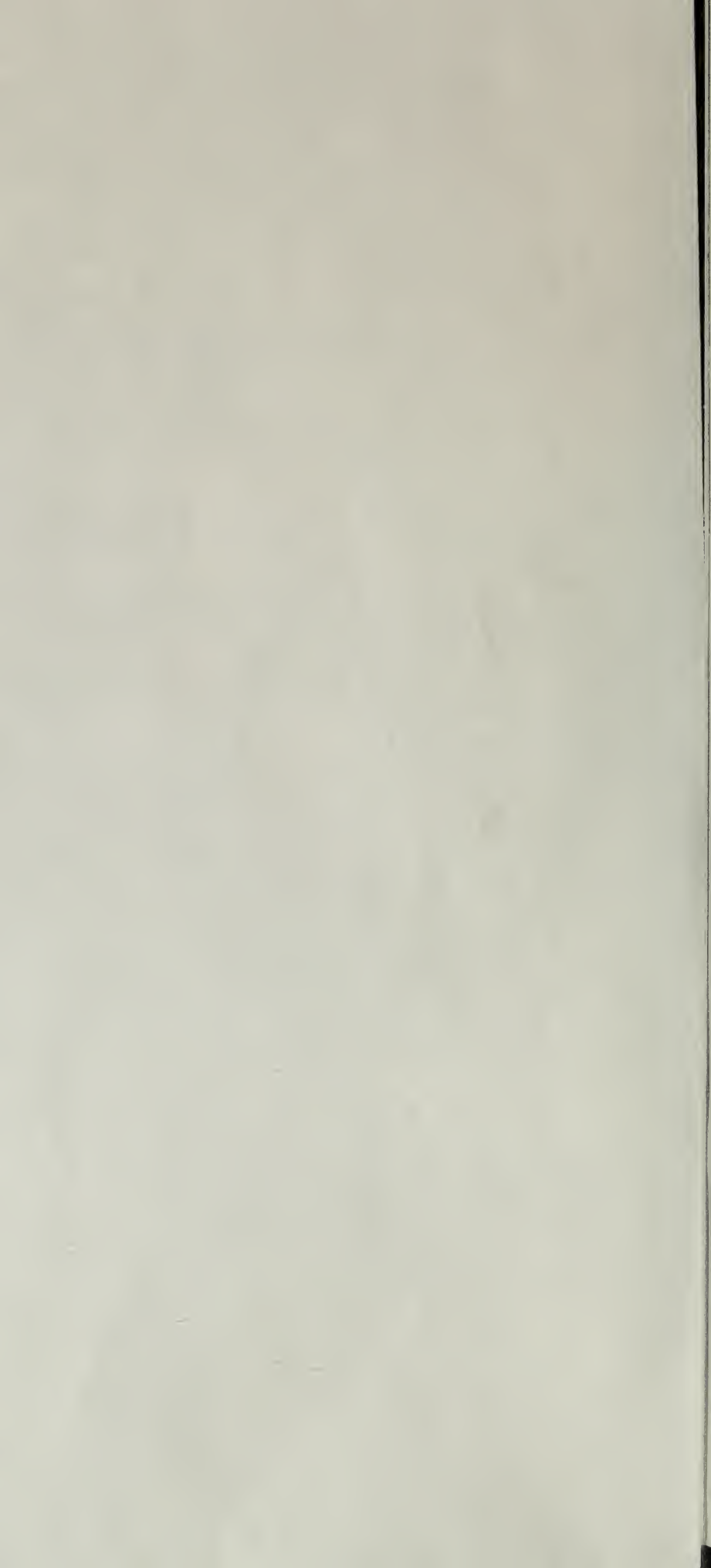
## Prevention

To prevent VND from entering Canada, government imposes strict regulations on our imports of poultry and poultry products from foreign countries. Shipments of pet birds, depending on the breed and country of origin, are quarantined and examined by a government veterinarian before entering Canada.

Smuggling of pet birds into Canada is common and presents a serious health risk to Canada's poultry industry. Canadian customs officials may conduct thorough inspections of travellers' personal effects. Travellers may also carry VND on their clothing and footwear if they visited a poultry farm in an infected country. Customs officials and travellers must be alert to this possibility.



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In California, this infected flock had to be slaughtered and buried.

## What YOU can do

When travelling:

- Declare all poultry products you wish to bring into Canada.
- Do not visit poultry farms in foreign countries.
- If you must visit a poultry farm while abroad, make sure that clothing and footwear you wear on the farm are free from soil and manure before entering Canada.
- If you visit a farm while abroad, do not go near a Canadian farm for 14 days.

On your farm:

- Be alert to abnormal conditions in your flocks.
- Do not deal in pet birds if raising poultry.
- Should you notice symptoms of VND in your poultry, contact your veterinarian or Agriculture Canada.



For more information, contact:

Animal Health Division  
Agriculture Canada  
2255 Carling Avenue  
Ottawa K1A 0Y9

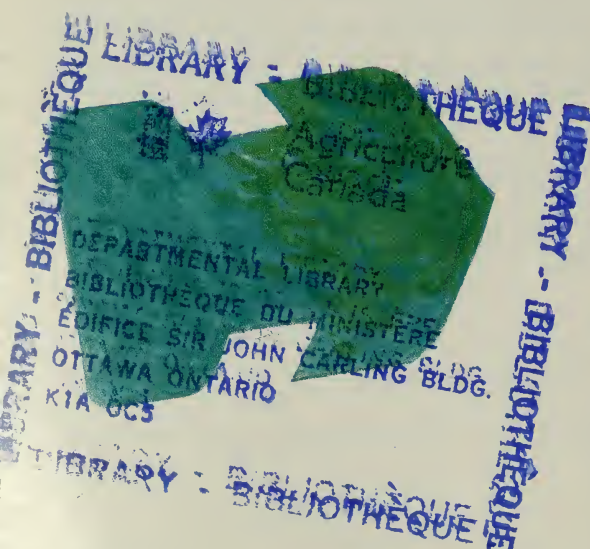
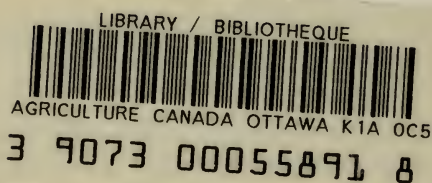
Telephone: (613) 995-5433

or the nearest Agriculture Canada veterinary inspection office.

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